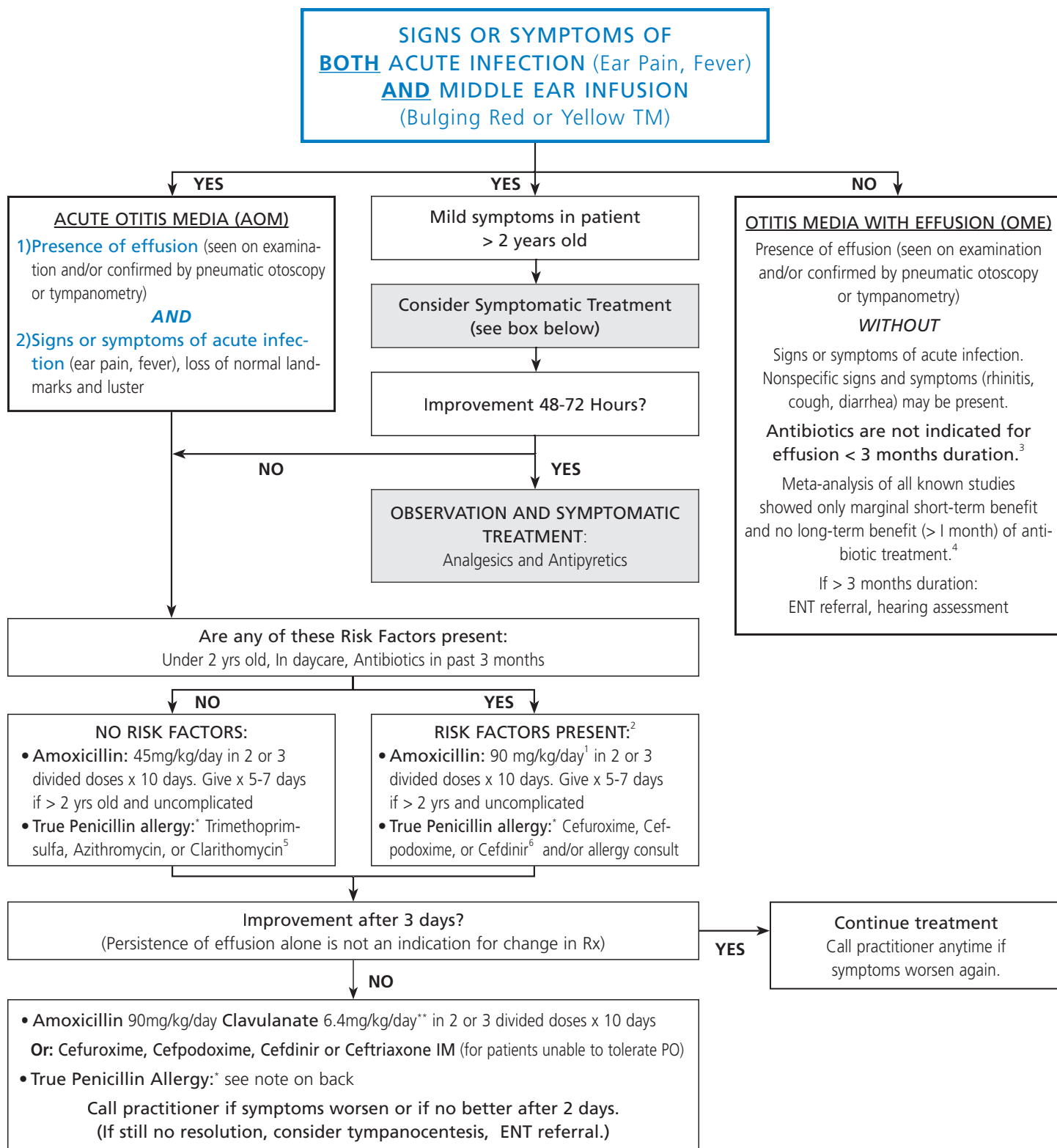


## Practice Guidance for JUDICIOUS USE OF ANTIBIOTICS

### OTITIS MEDIA<sup>1,2</sup>

"Otitis Media with Effusion does not require antibiotic treatment."



## COMMON PATHOGENS IN AOM

Organism	Incidence Rates	Spontaneous Remission
<i>Streptococcus pneumoniae</i>	30-35%	10%
<i>Hemophilus influenzae</i>	20-25%	50%
<i>Moraxella catarrhalis</i>	10-15%	90%

## WHEN TO USE ANTIBIOTIC PROPHYLAXIS<sup>7</sup>

- Limit to recurrent otitis media:
  - At least 3 distinct, well documented episodes in a six month period, or
  - At least 4 episodes in a 12 month period
- Amoxicillin 20 mg/kg/day (single dose hs) is the preferred agent
- Treatment should be limited to 3-6-month courses

## PREVENTION:<sup>8</sup>

- Vaccination:
  - All newborns and children < 2 yrs should receive Prevnar.<sup>9,10</sup>
  - Children with recurrent infections should receive Influenza vaccine if > 6 mo
  - 23-valent Pneumococcal vaccine if > 2 yrs<sup>11</sup>
- Cigarette smoke avoidance/cessation
- Consider allergen and irritant avoidance
- Consider tubes
- Encourage breast feeding
- Consider daycare avoidance

## NOTES:

- \* **True Penicillin Allergy:** history of urticaria or anaphylaxis to a penicillin are indicative of true allergy. Morbiform and maculopapular rashes are not indicative of true allergy.
- If history of penicillin anaphylaxis, consult an allergist before prescribing a cephalosporin.**

\*\* This dose ratio may not be available as a fixed combination. Clavulanate dose should not exceed 10mg/kg/day.

## References:

1. Dowell SF, Butler JC, Giebink GS, *et al.* Otitis Media: Management and Surveillance in an era of pneumococcal resistance—a report from the Drug-resistant Streptococcus pneumoniae Therapeutic Working Group, *Pediatr Infect Dis J*, 1999;18:1-9.
2. Dowell SF, Marcy SM, Gerber MA, Schwartz B. Otitis Media—Principles of Judicious Use of Antimicrobial Agents, *Pediatrics* 1998; 101:165-171.
3. Stool SE, Berg AO, Berman S, *et al.* Otitis media with effusion in young children. Clinical practice guideline. AHCPR Publication No. 94-0622 1994.
4. Williams RL, Chalmers TC, Stange KC, *et al.* Use of antibiotics in preventing recurrent acute otitis media and in treating otitis media with effusion. A meta-analytic attempt to resolve the brouhaha. *JAMA* 1993;270:1344-51.
5. Leiberman A, Leibovitz E, Piglansky L, *et al.* Bacteriologic and clinical efficacy of trimethoprim-sulfamethoxazole for treatment of acute otitis media. *Pediatr Infect Dis J*, 2001;20:260-4.
6. Klein JO, McCracken GH. Summary: role of a new oral cephalosporin, cefdinir, for therapy of infections of infants and children. *Pediatr Infect Dis J*, 2000;19:S181-3.
7. Teele DW, Klein JO, Word BM, *et al.* Antimicrobial prophylaxis for infants at risk for recurrent acute otitis media. *Vaccine*. 2000;19:S140-3.
8. Klein, JO. Nonimmune strategies for prevention of otitis media. *Pediatr Infect Dis J*. 2000;19:S898-92.
9. Glezen WP, Taber LH, Frank AL, *et al.* Influenza virus in infants. *Pediatr Infect Dis J*. 1997;16:1065-68.
10. Clements DA, Langdon L, Bland C, Walter E. Influenza A vaccine decreases the incidence of otitis media in 6-30 month old children in day care. *Arch Pediatr Adolesc Med*. 1996;150:652-3.
11. Kyaw MH, Clarke S, Edwards EF, *et al.* Serotypes/groups distribution and antimicrobial resistance of invasive pneumococcal isolates: implications for vaccine strategies. *Epidemiol Infect*. 2000;125:652-3.
12. Leibovitz E, Dagan R. Otitis media therapy and drug resistance part 2: current concepts and new directions. *Infect Med*. 2001;18:263-270.
13. Johnson C. The role of antibacterial therapy of acute otitis media in promoting drug resistance. *Paediatr Drugs* 2001; 3(10).

## CONTACT

Art Sprenkle, MD  
Washington State Medical Education & Research Foundation  
P: (425) 891-0502 email: asprenkle@myexcel.com

## CREATED WITH ASSISTANCE BY

John Watkins, RPh, MPH and Premera Blue Cross

This guideline is intended as a general reference. Practitioners should always independently assess each patient to evaluate whether care is indicated and what care and follow-up treatment may be appropriate under the circumstances presented. The clinical guidelines and information featured in this document are intended as an analytical framework for the evaluation and treatment of your patients. These Guidelines are not intended to replace your best clinical judgement or establish a protocol for all patients. We know that there is rarely one approach in treating a patient's clinical presentation.